NAME	POSITION TITLE
McGinnis, Lynda K.	**Assistant Professor of Research**
eRA COMMONS USER NAME **LMcGinnis2**	

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE	MM/YY	FIELD OF STUDY
Seattle University, Seattle WA	**B.S.**	**06/83**	**Biology**
Iowa State University, Ames IA	**M.S.**	**12/91**	**Physiology of Reproduction**
University of Kansas, Kansas City KS	**Ph.D.**	**05/09**	**Physiology of Reproduction**

A. Personal Statement

Oocyte quality lays the foundation for embryonic development and the health of the next generation. The environment, whether *in vivo* or *in vitro*, and treatment interventions such as chemotherapies affect the molecular signaling pathways within the ovary and oocyte and thus have significant influence on oocyte quality, embryonic development and potentially, generations into the future. I have 20 years of scientific research experience, first as a Research Associate at the Harvard Medical School studying environmental (*in vitro*) effects on fertilization and preimplantation embryonic development, then as graduate student and post-doc studying tyrosine kinase signaling in the oocyte and zygote. As new faculty at USC Keck, I hope to combine my background training in reproduction and tyrosine kinases toward understanding the effects of tyrosine kinase inhibitor chemotherapies on reproductive outlook of young cancer survivors. I have more that 40 publications in reproduction and development and have applied for a pilot grant through Norris-American Cancer Society to help us conduct background studies moving toward this new research direction.

B. Positions and Honors

Positions and Employment

1984-1987 Assistant Manager and Senior Veterinary Lab Tech, Carnation Research Farm, Carnation WA
1987-1989 Graduate Student, University of Idaho, Moscow ID
1990-1992 Research Associate & Graduate Student (transferred from Idaho with mentor Curt Youngs), Iowa State University, Ames IA
1992-2006 Research Associate, Dept. of Cell Biology, Harvard University Medical School, Boston MA
1999-2002 Embryologist, Obstetrics & Gynecology, Brigham & Women's Hospital, Boston MA
2003-2004 Graduate Student, Comparative Medicine, Tufts University Veterinary School, Grafton MA
2003-2005 Research Tech-III, Engineering in Medicine, Massachusetts General Hospital, Boston MA
2005-2009 Graduate Student (transfer from Tufts with mentor David Albertini), Dept. of Molecular & Integrative Physiology, University of Kansas Medical School, Kansas City KS
2009-2011 Post-doctoral fellow, Dept. of Anatomy & Cell Biology, University of Kansas Medical Center
2011-20015 Research Assistant Professor, Dept. of Molecular & Integrative Physiology, University of Kansas Medical School, Kansas City KS
2015-present Assistant Professor of Research, Dept. of Obstetrics and Gynecology, Division of Reproductive Endocrinology and Infertility, University of Southern California Keck School of Medicine, Los Angeles CA

Other Experience and Professional Memberships

1986-present International Embryo Transfer Society
1991-present Society for the Study of Reproduction
2005-present Society for Cryobiology
2015-present International Society of Extracellular Vesicles

Honors & Activities

1989 Gama Sigma Delta, University of Idaho, Moscow, ID
2006 Greenwald Symposium on Reproduction, 1st place presentation, KS

2008 Kathleen Osborn Travel Scholarship, University of Kansas, Kansas City KS
2008 Lalor Foundation Merit Award, Society for Study of Reproduction, Kona HI
2009 Graduated with Honors from the University of Kansas, Kansas City KS
2010-2011 Post-doctoral Association's Representative (senator) on the Graduate Council, University of Kansas, Kansas City, KS
2013 Co-organizer of the Symposium: Physiology of the Oocyte and Embryo – A Celebration of Professor John D. Biggers, Annual Meeting of the American Society for Reproductive Medicine, Boston, MA

Committees

2011-2012 Travel awards committee, Office of Post-doctoral Affairs, KUMC, KS
2014 Review committee for University of Kansas Biomedical Training Grants, KUMC, KS

Invited Presentations:

2007 Gordon Conference on Fertilization, Holderness, NH
2007 Greenwald Symposium on Reproduction, Kaufman Center, Kansas City, KS
2010 D.C. Johnson Seminar Series, University of Kansas Medical Center, Kansas City, KS
2010 Mechanisms of Maturation and Fertilization: From Land to Sea Symposium, Friday Harbor Research Labs, San Juan Island, WA.

C. Selected-Peer Reviewed Publications (selected from 44)

1. Hung, W-T, Hong, X, Christenson LK, McGinnis LK. (2015). Extracellular vesicles from bovine follicular fluid support cumulus expansion. Biol Reprod (in press).
2. McGinnis LK, Kinsey WH. 2015. Focal adhesion kinase in oocyte-follicle communication. Mol Reprod Dev 82:90-122. PMC4324459
3. Luo J, McGinnis LK, Carlton C, Beggs HE, Kinsey WH. 2014. PYK2B function during fertilization of the mouse oocyte. Biochem Biophys Res Commun 450:1212-7 PMC4133292
4. McGinnis LK, Hong X, Christenson LK & Kinsey WH. 2011. *Fer* tyrosine kinase is required for germinal vesicle breakdown and meiosis-I in mouse oocytes. Mol Reprod Dev 78:33-47. PMC3918464
5. Hong X, Luense LJ, McGinnis LK, Nothnick WB & Christenson LK. 2008. Dicer1 is essential for female fertility and normal development of the female reproductive system. Endocrinology 149:6207-6212. PMC2613048

Additional recent publications

1. Warren BD, Kinsey WK, McGinnis LK, Christenson LK, Jasti S, Stevens AM, Petroff BK, Petroff MG. 2014. Ovarian autoimmune disease: clinical concepts and animal models. Cell Mol Immunol 11:510-21. PMC4220644
2. McGinnis LK, Pelech S, Kinsey WH. (2014). Post-ovulatory aging of oocytes disrupts kinase signaling pathways and lysosome biogenesis. Mol Reprod Dev 81:928-45 PMC4211271
3. Albertini DF, McGinnis LK. 2013. A catalyst for change in reproductive science: John D. Biggers as a mentor's mentor. J Assist Reprod Genet 30:979-94. PMC3790115
4. McGinnis LK, Luo J & Kinsey WH. 2013. Protein tyrosine kinase signaling in the mouse oocyte cortex during sperm-egg interactions and anaphase resumption. Mol Reprod Dev 80:260-72 PMC3891396
5. McGinnis, LK, DF Albertini and WH Kinsey. 2007. Localized activation of Src-family protein kinases in the mouse egg. Dev Biol 306:241-254. PMC2694733
6. Summers MC, LK McGinnis, JA Lawitts and JD Biggers. 2005. Mouse embryo development following IVF in media containing either L-glutamine or glycyl-L-glutamine. Hum Reprod. 20:1364-1371. PMID: 15705624 B
7. Donohoe ME, Zhang X, McGinnis L, Biggers J, Li E & Shi Y. 1999. Targeted disruption of mouse Yin Yang 1 transcription factor results in peri-implantation lethality. Mol Cell Biol 119:10:7237-7244. PMID: 10490658
8. Kreidberg JA, Natoli TA, McGinnis LK, Donovan M, Biggers & Amstutz A. 1999. Coordinate action of *Wt1* and a modifier gene supports embryonic survival in the oviduct. Mol Reprod Dev 52:366-375. PMID: 10092116
9. Sicinski P, McGinnis LK & Biggers JD, et al. 1996. Cyclin D2 is an FSH-responsive gene involved in gonadal cell proliferation and oncogenesis. Nature 384:5 Dec:470-474. PMID: 8945475

D. Research Support

Ongoing Research Support

R21 (1R21HD082484-01) (McGinnis, PI, sub-award to USC)
Role: multiple-PI with Dr. Lane Christenson (University of Kansas)
Title: Exosome / microvesicle regulation of oocyte developmental competence

12/15/2014-
12/14/2016